



#### **Table of Contents**

Chapter 1 Introduction

Ten Years of Progress in Pollution Prevention

Chapter 2 Pollution Prevention Integration

Governor's Awards for Excellence in Pollution Prevention

Governor's Toxic Reduction Challenge

Compliance and Technical Assistance Program

Indiana 5-Star Environmental Recognition Programs

**Environmental Performance Track Program** 

Partners for Pollution Prevention

Department of Defense Pollution Prevention Partnership

Pollution Prevention Conference and Trade Show

Great Lakes Regional P2 Roundtable's 2000 Summer Conference

**OPPTA'S Website** 

Workshops and Site Visits

Greening the Government Environmental Management

System Pilot Project

International Organization for Standardization

Metal Casting Outreach

Indiana Waste Tire Management Program

Styrene Outreach

Compliance Assistance Manuals

**Printers Initiative** 

Planning for Profit...A Guide to Pollution Prevention

Chapter 3 Toxic Release Inventory: Quantitative Assessment of the State's Progress

in Pollution Prevention

Appendix A 5-Star Drycleaners

Appendix B 5-Star Vehicle Maintenance Shops

Appendix C 5-Star Child Care Facilities

# Ten Years of Progress in Pollution Prevention A Period of Development and Growth

#### Introduction

July 1, 2000 marked the tenth year for the Office of Pollution Prevention and Technical Assistance (OPPTA). This report is dedicated to Indiana' achievements in pollution prevention over the past decade. First we take the opportunity to provide highlights of ten years of OPPTA's progress in pollution prevention, a period of development and growth. In the second chapter we look at the accomplishments made in the years 2000 and 2001. Chapter 3 provides a report on the OPPTA's quantitative assessment of the State's progress in pollution prevention. There are no recommendations for legislative changes at this time.

### **Chapter 1: A Historical Perspective**

The enabling legislation enacted in 1990, the Indiana Industrial Pollution Prevention and Safe Materials Act, initiated the State's change in focus from an emphasis on pollution control to one that focuses on the more environmentally and economically sound approach of pollution prevention. This legislation marked the beginning of a shift from treatment and control of toxic waste to reducing or eliminating it. The original Act established three entities to guide Indiana's overall effort in pollution prevention: the Pollution Prevention Board, the Pollution Prevention and Safe Materials Institute, and the Office of Pollution Prevention and Technical Assistance, which is a part of the Indiana Department of Environmental Management (IDEM).

Indiana statute (IC 13-27-2) directs OPPTA to be responsible for integrating pollution prevention as a voluntary option into the regulatory process, providing technical assistance, maintaining a technical resource center, and conducting broad-based educational programs. Many OPPTA activities could not succeed without coordinating and sharing resources with other IDEM programs and external partners. Strong working relationships were forged among many IDEM programs, the business community and the public.

From early public access to a toll-free telephone line, and distribution of consumer brochures, printed materials, and case studies, OPPTA progressively developed full-service informational resources for both IDEM and Indiana businesses. A worldwide website provides electronic dissemination of Indiana's pollution prevention information, guidance documents, and other resource materials. Trained professional staff provides compliance assistance workshops and confidential access to pollution prevention and regulatory compliance assistance during business hours. These services are offered free of charge and without obligation.

#### **IDEM's Pollution Prevention Program**

On July 1, 1990, IDEM's, Office of Pollution Prevention and Technical Assistance (OPPTA) formally began operations. IDEM acted quickly to create an office staffed with an expertise in diverse areas of regulatory compliance and pollution prevention technologies. Some part-time, temporary, and student intern personnel supplemented support levels over the ten-year period. Currently 29 full time employees (25 at OPPTA and 4 regional office personnel) are working on OPPTA activities. The current assistant commissioner, Jim Mahern, was appointed on July 26, 1999.

#### Internal Initiatives: Building Pollution Prevention Infrastructure at IDEM

#### **Regulatory Integration of Pollution Prevention**

Legislation requires IDEM to incorporate pollution prevention concepts and methods into all its regulatory efforts. To fulfill this mission, OPPTA staff provides pollution prevention options in all

department actions including policy and planning, permit conditions and enforcement actions. Regulatory integration of pollution prevention has a long history in Indiana and has been accomplished through extensive staff training and forming working relationships with compliance, enforcement, permit and rule development staffs.

OPPTA addresses the challenges with a multi-faceted approach involving training programs at many levels. For pollution prevention to succeed, IDEM staff must have a solid understanding of the definition of pollution prevention; the significant manufacturing processes in Indiana and their inherent pollution prevention opportunities; and IDEM's policies regarding the incorporation of pollution prevention into the regulatory process.

#### **Training**

In August of 1992, IDEM formed a Pollution Prevention Workgroup with representatives from each regulatory program. The purpose of the workgroup was to oversee the incorporation of pollution prevention concepts throughout the agency. This workgroup was instrumental in planning and coordinating multi-media pollution prevention training.

On October 29, 1992, IDEM began training staff with a pollution prevention training program. The objective was to provide staff with the information and tools needed to articulate pollution prevention concepts to all interested parties and incorporate those concepts into their work products. The Environmental Management Institute (EMI), with the oversight of the IDEM Pollution Prevention Workgroup, designed and implemented the Introduction to Pollution Prevention Training. The introductory pollution prevention training was provided to the entire IDEM staff from October 29, 1992 through 1993.

The Introductory Pollution Prevention Training course was expanded and opened to the public in January 1994. OPPTA staff conducted this course throughout Indiana for over 2,000 persons.

Specific Industrial Process Pollution Prevention Training was developed and conducted for IDEM staff in 1994. Twelve individual courses were developed addressing pollution prevention opportunities in targeted Indiana industries. They are: coatings, electroplating, degreasing, printing, wood finishing and preserving, foundries, boilers, plastics and fiberglass, metalworking, petroleum processing and distribution, iron and steel, and automotive services. The six hours of seminars were presented to over 800 attendees. Many staff attended more than one session.

#### Joint Training Efforts

Over the past decade, OPPTA staff collaborated with other entities to provide additional pollution prevention training opportunities. Funded in part by Pollution Prevention Incentives to States (PPIS) grants provided by the Environmental Protection Agency (EPA) Region 5. Hands-on, function specific, and process oriented pollution prevention training opportunities have been developed and presented to staff and guests. Numerous multi-faceted pollution prevention training were provided including: remedial action planning, enforcement and inspection site evaluation, facility opportunity assessments, permit writing, train-the-trainer, program auditing, and confidentiality procedures.

Combined, these training experiences enabled continuous operational procedures and policy development to incorporate pollution prevention into all of IDEM's regulatory program activities. Ongoing pollution prevention seminars, conferences and teleconferences have been conducted for over 3500 IDEM participants and guests.

#### Formal Guidance for Supplemental Environmental Projects (SEPs)

As early as 1993, IDEM formed a workgroup led by the Office of Enforcement to develop formal guidance on SEPs. SEPs can be used to achieve environmental benefits that can offset portion of civil penalties assessed in enforcement actions. Pollution prevention provides many benefits for the environment, thus making it a great candidate for SEPs. The Office of Enforcement provides the largest offset of the gravity portion of assessed penalties when companies voluntarily choose pollution

prevention projects for SEPs. Pollution prevention provides businesses with an opportunity to come into compliance with environmental regulations and often provides economic gain at the same time.

#### **Pollution Prevention in Permit Options**

IDEM has worked to present pollution prevention options in permits since the early 90s. If presented alternatives early in the permitting process, a facility may be able to modify their use of materials, and/or the process design to prevent pollution. Often this occurs during the design for a new operation or a major modification at an existing facility. Pollution prevention must be presented as voluntary options to potential permit applicants prior to their application for a permit. IDEM takes this approach because statutory language (IC 13-27-7) limits the activities of OPPTA and the implementation of pollution prevention to voluntary actions taken by the regulated community.

#### **Pollution Prevention Rule Impact Analysis**

OPPTA performed pollution prevention impact analysis for proposed and final environmental rules. The purpose of this analysis is to provide the agency with an opportunity to identify barriers to pollution prevention and to recommend methods to reduce them where appropriate. IDEM began impact analysis of notices and proposed rules published in May 1994.

After having the opportunity to address rule making and policy development over a three-year period, this procedure was re-evaluated and revised in 1997. OPPTA now concentrates efforts on providing support to rule writers who work to provide incentives for pollution prevention opportunities during the rule writing process. Since December 1996, rule writers provide feedback and continue to improve the pollution prevention impact analysis process. Upcoming rules making are proactively reviewed by OPPTA to identify those with potential opportunities for pollution prevention compliance measures.

#### **External Initiatives: Reaching Out to Hoosier Businesses and the Public**

#### **Working with Indiana Businesses**

Through the years, OPPTA has constantly seized opportunities to inform Hoosiers about pollution prevention. Today our efforts expand to regional distribution of services to protect the Great Lakes region and the entire State.

#### Clean Manufacturing Technology Board

The Pollution Prevention Board was created by statute in 1990 and reestablished in 1997 as the Clean Manufacturing Technology Board (CMTB). The Board is legislatively directed to support and maintain the State's Clean Manufacturing Technology program and to provide policy direction for future endeavors. Its primary function is to oversee the operation of the Indiana Clean Manufacturing Technology and Safe Materials Institute. The CMTB meets quarterly and is dependent on OPPTA staff for implementation of its mission.

#### Clean Manufacturing Technology and Safe Materials Institute (CMTI)

CMTI provides technical assistance and education services to a variety of Indiana's industry. Formerly the Pollution Prevention and Safe Materials Institute, CMTI began operations on January 1, 1994. OPPTA works cooperatively with CMTI in the oversight and administration of its challenge grants and pilot projects. OPPTA and CMTI often share resources to provide dual leadership to technical and compliance assistance initiatives for manufacturing concerns and to enhance pollution prevention training and outreach endeavors.

#### **Indiana Department of Commerce (IDOC)**

OPPTA frequently works with the Indiana Department of Commerce (IDOC). Since the early 1990's, the IDOC has shared its resources to support several pollution prevention initiatives and continues to the present. These referrals and jointly sponsored programs and events have been crucial for improving communications and relations between the business community and IDEM.

#### **The Indiana Electroplaters Association**

IDEM teamed up with the Indiana Electroplaters Association (IEA) as early as 1989 to provide outreach to its membership. An annual Pollution Prevention for Electroplaters Conference was established in 1992 by CMTI that continues today. The IEA is currently working with the Environmental Protection Agency (EPA), IDEM, and the Clean Manufacturing Technology and Safe Materials Institute (CMTI) on a statewide Federal Strategic Goals Initiative for electroplaters and surface finishers.

#### **Wood Furniture Partnership Project**

OPPTA and CMTI became partners in 1997 in an attempt to prepare Indiana's Wood Furniture Manufacturers for the National Emission Standards for Hazardous Air Pollutants. Volatile, hazardous air emissions from wood furniture manufacturing operations are now regulated as they never had been before and the industry needed assistance to meet the rule deadline. CMTI provided on-site training for companies throughout Indiana to meet the requirements of the NESHAP.

OPPTA gave CMTI a \$25,000 grant to develop a compliance assistance manual for the wood furniture industry and also supported development of the compliance assistance manual for the fiber reinforced plastics sectors; this manual is at the same website (for fiber reinforced plastic). The manual, an interactive web-based tool, is available at <a href="www.in.gov/idem/ctap/wood">www.in.gov/idem/ctap/wood</a>. OPPTA developed sample reporting forms, guidance materials, and held workshops to be sure the industry knew what was to come. With the help of OPPTA, CMTI, the Office of Air Quality, and the local Chamber of Commerce's, Indiana's wood furniture industry reduced hazardous air pollutant emissions by 53% between 1996 and 1998. OPPTA continues to communicate regularly to this industry through a listserve it developed specifically for Indiana wood furniture companies. OPPTA also schedules IDEM employees to speak to local wood furniture environmental groups on topics from air permitting to stormwater issues.

#### **Compliance and Technical Assistance**

In 1995, public law made OPPTA the center of IDEM's Compliance and Technical Assistance Program (CTAP). CTAP provides confidential assistance to Indiana businesses. Our efforts include conducting educational workshops, performing confidential site visits, providing confidential phone assistance, and developing recognition programs, compliance assistance manuals, and fact sheets. In all cases OPPTA reviews all materials related to pollution prevention techniques and chemical specific information to ensure consistency with statutory definitions and requirements for all environmental programs.

Over the years OPPTA developed pollution prevention and compliance assistance materials for the following business or operation types:

- Childcare
- Confined Feeding Operations
- Collision Repair/Auto Refinishing Shops
- Degreasing
- Drycleaners
- Electroplaters
- Fiber Reinforced Plastic Products
- Flexible Polyurethane Foam Production
- Heating, Ventilation, Air Conditioning and Refrigeration (HVAC-R)

- Hospitals
- ISO-14001
- Mercury Waste Generators
- Mineral Aggregate Facilities
- Printers
- Surface Coating
- Vehicle Maintenance Shops
- Waste Tire Processors
- Wood Furniture Manufacturers

Many examples of the materials developed are available at OPPTA's worldwide web site found at: www.in.gov/idem/oppta/publications.

In addition to the preceding list, OPPTA staff provides compliance assistance materials and workshops covering Toxic Release Inventory reporting requirements of the USEPA to a wide range of Indiana

business sectors. The table (Table 1) below contains an annual break down of OPPTA's compliance assistance activities.

The table below show significant progress for OPPTA in reaching and assisting Indiana businesses and citizens. From 1996 through 2000, assistance efforts (contacts made) increased by 406%. For 2001, the upward trend is expected to continue with a projected 5.4% increase from year 2000. OPPTA is working with the Indiana Department of Commerce on release of the new CTAP brochure. The brochure promotes the services that IDEM's CTAP program has to offer. The Department of Commerce typically distributes 50-100 information packets to new and existing businesses each month.

TABLE 1: 5 Yea	r History	of OPP	TA Sma	ıll Busin	ess Assist	tance Contacts
Contact Type	1996	1997	1998	1999	2000	Jan-Sept.30 2001
Phone Assistance	2,254	3,200	2,770	2,785	2,972	2,797
Onsite Visits	411	138	155	245	296	396
Seminars/Workshops	80	565	764	1,491	2,485	1,104
Publications *	2,133	3,364	6,724	4,290	10,985	8,120
Home Page Hits	1,318	600	1,574	3,691	6,313	10,019
Teleconference	0	0	67	0	0	0
Mailings	1,050	225	6,935	10,730	13,908	11,132
Total Contacts Made	7,246	8,092	18,989	23,232	36,758	33,568

<sup>\*</sup> Includes guidance manuals, fact sheets, brochures and annual reports.

In 1999, an Office of Pollution Prevention and Technical Assistance (OPPTA) staff position was created in the Northern Regional Office (NRO) located in South Bend. Since filling the NRO position in March of 2000, the NRO staff person has aggressively sought to increase the regulated public's awareness of the services provide through the Compliance and Technical Assistance Program (CTAP) and OPPTA. The NRO staff person has performed in excess of 260 site visits throughout the 10 county Northern Region to introduce and promote usage of the CTAP and OPPTA services. Due to the large number of facilities in the Northern Region, outreach efforts have focused on the vehicle maintenance program and the Fiberglass Reinforced Plastics Initiative. Additional efforts have been directed at the Lead, Mercury, and Childcare programs. The success of these efforts is demonstrated by the dramatic increase in inquiries made to CTAP by organizations that have been directly contacted by regional staff.

The regulated community, businesses and the public at large have met these efforts with broad acceptance. Thousands of people learned about pollution prevention and environmental compliance through CTAP.

#### **Partners for Pollution Prevention**

OPPTA first brought the Partners for Pollution Prevention together in 1996. The group was made up of former winners of the Governor's Awards for Excellence in Pollution Prevention, recipients of IDEM Pollution Prevention Challenge Grants and entities accepting the 1998 Governor's Toxic Reduction Challenge. The group met quarterly to discuss pollution prevention issues, explore ways to carry the pollution prevention message to other Indiana businesses and to advise IDEM on pollution prevention policy and program development.

With the support of a pollution prevention challenge grant from OPPTA, the Partners organized and began to host a Pollution Prevention Conference and Trade Show in 1998. With a three-year average annual attendance of 200 registrants, the conference became a very successful annual event. In the spring of 1999, pollution prevention partnership discussions began between OPPTA and Indiana based

Department of Defense (DoD) installations. An update on the DoD partnership is included in the next chapter. Additional information on the Partners for Pollution Prevention is available on the web at <a href="https://www.in.gov/idem/oppta/p2/partners">www.in.gov/idem/oppta/p2/partners</a>. For information on the DoD Partnership, check the web at <a href="https://www.in.gov/idem/oppta/p2/dod">www.in.gov/idem/oppta/p2/dod</a>.

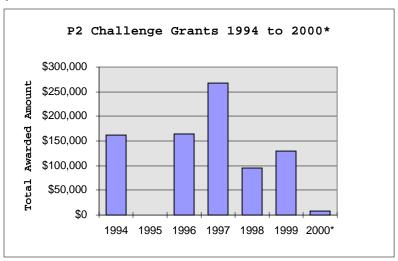
#### **Hospitals Initiative**

Working with the external partners, OPPTA designed a pledge program for hospitals to encourage them to become virtually mercury free. Elements of the pledge include maintaining an inventory of all mercury-containing items, immediately discontinuing the distribution of mercury-containing fever thermometers and implementing a Hospital Initiative mercury-free purchasing policy. The program was kicked off in November 2000. Ten hospitals have signed the pledge to date. For a list of participants, visit <a href="www.in.gov/idem/ctap/hospitals/pledge">www.in.gov/idem/ctap/hospitals/pledge</a>. Since our initial work a national initiative has been implemented. We are transitioning our pledge program to the "Hospitals for a Healthy Environment" (H2E) program. This program is managed at the national level and supported by EPA and the American Hospital Association, which will give participants both national and state recognition. OPPTA will continue to support our hospitals' efforts to eliminate mercury and we will be the state contact for the H2E program.

The Hospital Advisory Group continues to meet quarterly to discuss waste management issues and other environmental concerns. There are over 50 active members of the Hospital Advisory Group.

#### Challenge Grants

In 1994, OPPTA began coordinating with Clean manufacturing Technology Board and Clean Manufacturing Technology and Safe Materials Institute on a Pollution Prevention Challenge Grant Program to serve as a catalyst for Indiana businesses to develop innovative pollution prevention technologies. Although work associated to 1994 Pollution Prevention Challenge grants was occurring throughout 1995, no grants were awarded that year. Since the first grant round, forty-six grants totaling approximately \$825,708 have been awarded.



#### **Great Lakes Regional Pollution Prevention Roundtable**

The Great Lakes Regional Pollution Prevention Roundtable (GLRPPR) formalized by drafting of a mission and charter statement in 1994. It provides a forum for regional pollution prevention policy development focused on protecting the Great Lakes. The roundtable's mission statement ensures information sharing, issue discussion and program development among member organizations to be primary goals. USEPA Region 5 provides funding to support GLRPPR and member services. OPPTA has been an active member in GLRPPR since it's inception. Many of OPPTA's programs were developed and shared with GLRPPR members.

#### **Recognition Programs**

OPPTA established pollution prevention recognition programs based on specific criteria for good management practices, innovated technologies and other practices that go above and beyond compliance with environmental regulations. The purpose of the programs is to formally recognize outstanding environmental performance of facilities. OPPTA utilizes a cooperative approach by working with academia and industry specific representatives to assist in the development of instructional materials, soliciting and nominating award candidates, and participating in the selection of award recipients.

#### Governor's Awards for Excellence in Pollution Prevention

In 1994, OPPTA began the annual Governor's Awards for Excellence in Pollution Prevention. The awards provide recognition to manufacturers, businesses, organizations, vendors, educators and dedicated individuals for their outstanding pollution prevention initiatives. The awards serve a second function by providing OPPTA and the winners with an opportunity to demonstrate successful pollution prevention strategies to others. In the program's seven-year history, businesses and organizations won a total of forty-nine (49) Governor's Awards. During this time all award winners prevented a combined total of more than 53,385 tons of toxic pollution from entering Indiana's environment. For additional information on the Governor's Awards, please check the web at <a href="https://www.in.gov/idem/oppta/govawards">www.in.gov/idem/oppta/govawards</a>.

#### **Governor's Toxic Reduction Challenge**

The challenge was kicked off on April 24, 1998, as part of Governor Frank O'Bannon's address to the Sixth Annual Governor's Conference on the Environment. The Governor's Toxics Reduction Challenge established goals and set objectives for Indiana's manufacturers and businesses to achieve. The Governor's Challenge is a voluntary commitment from industry, business, local government and quasi-governmental organizations to support the state's efforts to meet the established goals. A total of 60 organizations, which includes 79 individual facilities, accepted the challenge.

#### The Challenge:

- Reduce toxic chemical releases to the air and water from 1995 levels by:
  - a. 50% by December 31, 2000 in large urban areas for carcinogens and persistent, bioaccumulative toxic chemicals;
  - b. 60% statewide by December 31, 2002, for these same chemicals; and
  - c. 50% statewide by December 31, 2002, for all toxic chemicals reported to the Toxic Release Inventory; and
- Energetically help the state reach these goals through efforts emphasizing pollution prevention within the organization and/or in cooperation with other organizations.

For more information on the Challenge, refer to the web at www.in.gov/idem/oppta/p2/toxicchallenge

#### **Five Star Programs**

In 1995, OPPTA initiated Indiana's Five Star Recognition Programs for strategically selected small business operations. Small business sectors with high impact to customers' or employees' health and safety or utilizing significant quantities of toxic substances, with readily available cost-efficient pollution prevention opportunities were targeted. The integrated education for drycleaners became the leading example of the Compliance and Technical Assistance Program. The success of this effort sparked the development of other sector based five star recognition programs for vehicle maintenance shops, child daycare facilities and most recently for the metal finishing industry.

#### **Drycleaners Initiative**

The first of the 5-Star programs was the Indiana 5-Star Recognition Program for Drycleaners. This cooperative effort with the Indiana Drycleaning and Laundry Association, was the first of its kind in the nation. The drycleaner initiative also includes a comprehensive compliance manual and brochures for neighbors and customers. Drycleaner onsite compliance assistance continues to be provided by OPPTA staff. For more information, refer to the web at <a href="https://www.in.gov/idem/ctap/cleaners">www.in.gov/idem/ctap/cleaners</a>

#### Vehicle Maintenance 5-Star Recognition Program

Using the integrated education program for drycleaners as a model, OPPTA began development of the comprehensive program for vehicle maintenance shops in 1998. Within a year a four-part multi-media compliance assistance program consisting of a regulatory compliance manual, informational brochures, educational workshops and a 5-Star Recognition Program was rolled out and available on the web at <a href="https://www.in.gov/idem/ctap/vehicle/index.html">www.in.gov/idem/ctap/vehicle/index.html</a>. There have been six rounds of awards since the program started, with a total of fifty-two shops participating in 35 cities throughout the state.

#### **Childcare 5-Star Recognition Program**

In December 1998, the Office of Pollution Prevention and Technical Assistance developed and implemented the 5-Star Environmental Recognition Program for Child Care Facilities. This program is the first of its kind in the nation. The program recognizes facilities that go above and beyond the requirements of environmental, health and safety regulations. Facilities can earn one, three or five stars based on how they address lead, radon, asbestos, pesticides, mercury, indoor air quality, fire safety, recycling, energy efficiency and environmental education. In July 2001, the Indiana 5-Star Environmental Recognition Program for Child Care Facilities received the 2001 Innovation Award from The Council of State Governments during the Midwestern Legislative Conference.

During 2001, many of the educational materials associated with this program were updated and reprinted. New materials were also developed and are currently being distributed. These include a training video, "Protecting Children from Environmental Threats: Guidance for Indiana Child Care Facilities,". A new quarterly newsletter, "Simple Steps to Protect Kids..." began distribution in the fall of 2000. The newsletter addresses current environmental health threat issues such as chemical safety, asthma, sun safety, treated lumber, carbon monoxide, radon, etc. The newsletter is mailed to all participating facilities along with free posters, activity suggestions, and more. The newsletter as well as the other assistance materials above is available on the internet at: <a href="www.in.gov/idem/kids/5star">www.in.gov/idem/kids/5star</a>.

Technical assistance has continued with site visits to facilities interested in the program. Currently, 59 facilities are participating in this program.

IDEM's Commissioner, Lori Kaplan awarded plaques to several facilities. Presentations were made at conferences throughout the state. During a regional Head Start Conference, in front of more than 1,200 attendees, Commissioner Kaplan recognized two Head Start directors who have played a major role in helping Head Start facilities receive stars.

Cinergy and Eli Lilly worked with IDEM to provide free "Starter Kits" to low-income childcare facilities located in previously selected environmental justice areas. Cinergy and Eli Lilly purchased items including mercury spill kits, caulk and caulk guns, digital thermometers, soap, plastic containers, carbon monoxide alarms, radon test kits, cabinet locks, fluorescent bulb covers, and more. Fifteen kits were created and distributed throughout Indiana to cities including Evansville, Indianapolis, Lafayette, and Terre Haute. These kits provoked many phone calls and site visits and in September 2001, one of the childcare facilities, helped by the "Starter Kit" program, became the first of this group to receive five stars.

#### **Working with Hoosier Families**

#### **Protecting Children from Environmental Threats**

In July 1997, as part of Governor O'Bannon's multi-agency Building Bright Beginnings campaign, IDEM began working to make Indiana a safer place for all Hoosier children. OPPTA was designated the leader of the IDEM priority to protect children from environmental threats. A series of initiatives were developed to reduce toxic substances, educate families and involve children. An educational program was developed and implemented to provide families with tangible options to make their homes safer for children.

#### Lead Awareness Program

In February 1998, Governor O'Bannon began the Lead Awareness Program by announcing IDEM would dedicate funds to assist six counties where testing identified the highest concentrations of elevated blood lead levels in children. OPPTA was designated as the program lead and worked with the Indiana State Department of Health and the Marion County Health Department to identify the target areas of Marion, Lake, St. Joseph, Allen, Elkhart and Vanderburgh counties. In these areas, grants totaling \$106,000 were made available to the local government to educate at-risk families in neighborhoods with the highest risk of lead exposure to children. An additional \$172,000 was provided to offer free, lead risk assessor training to 108 community-based lead inspectors. Assessors identified areas where children may be at risk of lead poisoning, promoted awareness of the lead risks and educated families on ways to reduce exposure to lead. Over 1,300 free lead risk assessments have been provided to childcare centers and homes throughout the state.

This year, Federal funds that paid for analysis of lead risk assessment samples run out. Several options are being researched to continue this program. For more information, visit www.in.gov/idem/kids/lead.html.

#### **Mercury Awareness Program**

The Mercury Awareness Program was created in October 1998, as a joint effort with the Regional Household Hazardous Waste Task Force and Solid Waste Management Districts. OPPTA created posters, brochures, magnets and other informational materials that identify sources of mercury around the household. In partnership with numerous organizations including Solid Waste Management Districts, OPPTA established mercury collection sites in every county of the state.

OPPTA conducted several mercury-containing fever thermometer exchange events in 2000 and 2001. Residents received a free, digital thermometer in exchange for a mercury-containing fever thermometer. Items such as thermostats and containers of elemental mercury were also collected. Over 6700 mercury-containing fever thermometers were collected during the 2000 and 2001 thermometer exchange events; we also collected over 100 pounds of elemental mercury. For details on exchange events and other mercury information, visit <a href="https://www.in.gov/idem/mercury">www.in.gov/idem/mercury</a>.

### **Chapter 2**

Update: October 1999 to September 30, 2001

#### **Internal Initiatives: Pollution Prevention Regulatory Integration**

Title 13, IC 13-27-2-6, OPPTA shall assist other governmental regulatory programs in devising standards, administrative rules and permits based on the goals and principals of Pollution Prevention.

Using a \$60,000 federal EPA Pollution Prevention Incentives to States Grant, with a 50% matching requirement, OPPTA implemented an enhanced P2 regulatory integration program. A leading national consultant, Kerr, Greiner, Anderson & April, Inc. assisted with the project. The purpose of this grant endeavor is to further weave pollution prevention into the "fabric" of core regulatory programs at IDEM and link it to the drivers of day-to-day operations. These drivers include policies and guidance, work plans, position descriptions, and standard operating procedures.

A senior management steering committee was formed in September of 1999 to guide the development of a preliminary list of media specific P2 regulatory integration recommendations. To be most effective, specific P2 projects were developed with program staff and the assistance of the consultant and OPPTA. The intent of these initiatives is to focus pollution prevention efforts on a particular program area's need, and to prevent the potential transfer of waste from one media to another. On June 13, 2000, ten short-term projects were selected from the list and approved for implementation. Staff workgroups were selected to design these projects within their program areas:

- (1) P2 in mercury policy and rules
- (2) Improve Office of Air Quality/P2 rule development coordination
- (3) Office of Air Quality P2 permits and rules electronic guidance tool
- (4) Guidance for preparing/evaluating P2 supplemental environmental projects
- (5) Compliance and inspection P2 targeting for PBT industrial waste
- (6) Compliance and inspection P2 targeting for water in rural schools
- (7) Compliance and inspection P2 targeting for air quality
- (8) P2 in clean-up (remediation) programs
- (9) Promote energy efficiency/P2 technology for drinking water supply
- (10) Promote energy efficiency/P2 technology in wastewater treatment

The initial project design phase was completed in late December 2000 and the overall in-house review completed in January and February 2001. Teams began the implementation phase of their respective projects on or about March 1, 2001. The monitoring of progress in P2 regulatory integration will be accomplished through project incorporation into the State's Environmental Performance Partnership Agreement, (EnPPA) with U.S.EPA, Region 5. Regulatory integration goals and objectives have been made an integral part of the EnPPA priorities and will be tracked comparatively with other similar competing programmatic activities.

#### **Governor's Awards for Excellence in Pollution Prevention**

The Governor's Award for Excellence in Pollution Prevention is Indiana's premier recognition to manufacturers, businesses, organizations, educators, and dedicated individuals for outstanding initiatives and innovative approaches to pollution prevention.

Awards can be achieved in seven categories:

*Pollution Prevention in Practice*—Projects focus on innovative input substitutions, product reformulation and production process changes.

Education and Outreach Programs — To encourage, promote and assist Indiana businesses in reducing or eliminating the use of toxic materials or the generation of toxic environmental waste.

*Environmental Management Systems* — Outstanding pollution prevention achievements documented as part of certification in an EMS, such as ISO-14001.

*Mentor* — Organizations or individuals who share pollution prevention successes to benefit the environment in their communities.

*Research and Development* — Projects that involve the research and development of new pollution prevention technologies or practices.

Agriculture — Practices that decrease risk and environmental harm, reduce the use of natural resources, minimize chemical inputs, and protect environmentally sensitive areas.

*Energy* — Innovative technologies and practices that increase energy efficiency or substitute to environmentally benign fuel sources.

A review committee representing industry, government, academia and environmental groups selected nine award recipients and one honorable mention for the year 2000 and seven awards recipients and three honorable mentions for the year 2001. For both years, the award ceremony was a highlight of the Annual Pollution Prevention Conference and Trade Show.

IDEM Commissioner Lori F. Kaplan and OPPTA Assistant Commissioner Jim Mahern presented the Seventh Annual Governor's Awards for Excellence in Pollution Prevention in Greenwood on September 20, 2000. IDEM Commissioner, Lori F. Kaplan, OPPTA Assistant Commissioner, Jim Mahern, and Governor O'Bannon's Deputy Counsel and Executive Assistant for the Environment, Beth Compton, presented the Eighth Annual Governor's Awards for Excellence in Pollution Prevention in Indianapolis on September 19, 2001.

#### Special note:

The 2000 and 2001 award winners received a plaque made from LEXAN®, which is the result of General Electric Plastic's 1999 award-winning P2 project.

#### 2001 Awards

#### Pollution Prevention in Practice Category Altec Engineering, Inc. Elkhart, Elkhart County

Altec Engineering, Inc. received an award for being Indiana's first manufacturer to utilize a new application system for the outer most coating of fiber reinforced plastic. Its work is on a full production basis. The new system uses a fanned stream instead of atomized spraying to apply the gel coat resins to an open-mold part. This new application system is an emission-reducing alternative to the much more traditional atomized gel coat application system. Emissions testing carried out at the Indiana Clean Manufacturing Technology Institute at Purdue University demonstrated the new application system capable of reducing styrene emissions by more than 30 percent.

### Flexible Foam Products, Division of Ohio Decorative Products Elkhart, Elkhart County

Flexible Foam Products, a national leader in flexible foam manufacturing, switched from the industry standard methylene chloride reliant process, to a toxic-free, carbon dioxide foam manufacturing process. The new process produces higher quality foam material, while completely eliminating methylene chloride emissions. The newly implemented system will eliminate an average of 700,000 pounds of methylene chloride releases to the air in Indiana every year.

#### Research and Development Category

#### Alcoa Inc./Praxair Inc.

#### Newburgh, Warrick County

Alcoa Inc. and Praxair, Inc. received an award in the Research and Development category. Alcoa and Praxair researched, developed and tested a "High Yield Melting (HYM)" process on a prototype aluminum-melting furnace at Alcoa's Warrick operations. The testing demonstrated that the HYM technology could reduce nitrogen oxides emissions by 50 percent, natural gas consumption by 45 percent and waste metal generation by 85 percent. As a result of the tests, Alcoa is considering implementing the HYM technology at appropriate facilities around the world. Alcoa also submitted a second project that replaced a filtration system with a new distillation process that eliminated almost two million pounds of landfill waste annually.

#### Environmental Management System Category

#### **BAE SYSTEMS Controls**

#### Fort Wayne, Allen County

BAE SYSTEMS Controls received an award in the Environmental Management System category. This company received its ISO 14001 registration in 1997 and has worked since that time to continually identify and implement innovative improvements. The green lights program, which was part of BAE SYSTEMS ISO 14001 efforts, resulted in a 44 percent decrease in energy demand for lighting. BAE SYSTEMS also implemented an automated board coating process and a nitrogen-blanketing wave soldering process that, when combined, resulted in a 3 percent reduction in waste.

#### Nishikawa Standard Company

#### New Haven, Allen County

Nishikawa Standard Company received an award in the Environmental Management System category. This company received its ISO 14001 registration in December of 1999 and has reduced its hazardous waste by 68 percent, hazardous air pollutants by 70 percent and non-hazardous air pollutants by 55 percent while increasing the amount of rubber produced by 32 percent. These accomplishments were realized through the development and continual improvement of its Environmental Management System, which included improvements to the die development process through computer aided design, improvements to the rubber extrusion process, elimination of solvent based coatings and enhanced employee training.

#### **Energy Category**

#### Indiana Air National Guard, 181st Fighter Wing Terre Haute, Vigo County

The Indiana Air National Guard, 181st Fighter Wing received an award in the Energy category. The 181st Fighter Wing implemented a state-of-the-art energy conservation initiative that reduces the energy demands of the base by 21.7 percent, even though the base increased its building area by 23 percent. The initiatives included the use of variable frequency motor drives, new energy efficient building designs and a digital control system. The comprehensive system allows for load sharing, peak shaving and demand reduction initiatives that integrate the older buildings into a comprehensive facility-wide energy saving operation.

#### Reilly Industries, Inc.

#### **Indianapolis, Marion County**

Reilly Industries, Inc. received an award in the Energy category. Reilly implemented a comprehensive water conservation project that resulted in significant energy savings. The project involved the collection and return of steam condensate from five of the eight production units at Reilly's Indianapolis plant. The project resulted in an almost 33 million gallons per year reduction in city water use and wastewater discharge, which enabled Reilly to reduce nearly 50 billion BTUs of energy

consumption. The energy use reduction translates into a reduction in fuel oil usage by almost 100,000 gallons each year.

#### Energy Category (Honorable Mention)

#### **Grissom Air Reserve Base**

#### Grissom ARB, Miami/Cass Counties

Grissom Air Reserve Base was recognized for a large-scale energy conservation retrofit of the lighting and heating systems for about 80 percent of the base.

#### Environmental Management System (Honorable Mention)

#### **Sabin Corporation**

#### **Bloomington, Monroe County**

Sabin Corporation was recognized for establishing an Environmental Management System that reduces the amount of energy needed to run its facility and for implementing several pollution prevention initiatives.

#### Wayne Metal Protection Company, Inc.

#### Fort Wayne, Allen County

Wayne Metal Protection Company, Inc. was recognized for establishing an Environmental Management System that reduces the amount of water flow to its electroplating rinse tanks and decreases the metal discharged to the sewer.

#### 2000 Awards

#### **Energy Category**

**Primary Energy**, a NiSource subsidiary in Merrillville, is a company that works with large industrial facilities in northwest Indiana and elsewhere. Primary Energy develops, engineers, constructs, operates, and maintains co-generation plants at large and medium scale industrial operations. Primary Energy's plants strive to be energy efficient and to utilize waste heat or waste gases whenever possible. Through their waste by-product recovery and other efficient co-generation systems, Primary Energy added over 400 megawatts of electric capacity to these industrial operations. The pollution prevention efforts of these plants caused the following annual reductions in emissions: over 6,000 tons of sulfur dioxide, over 5,700 tons of nitrogen oxides, and over 1.8 million tons of carbon dioxide.

**Rolls-Royce Corporation**, in Indianapolis, eliminated the use of coal over a three year period and is now using landfill methane/natural gas in 3 industrial boilers. Rolls-Royce worked with Southside landfill and Granger Electric Co. to utilize as much as 6 million cubic feet of methane gas every day. Sulfur dioxide emissions decreased by 1,200 tons per year and nitrogen dioxide emissions by roughly 29 tons from the Rolls-Royce boilers. In addition, methane gas emissions will be cut by 15,000 tons per year. This project is an excellent example of how industry can replace fossil fuels with an alternative source of energy.

#### **Mentor Category**

This was the first year IDEM gave a pollution prevention award to a chamber of commerce. **The Jasper Chamber of Commerce** received an award for their efforts with the local wood manufacturers environmental managers organization. Through a grant from the Indiana Department of Commerce, the Jasper Chamber of Commerce was instrumental in facilitating technical assistance and training to over 1,000 finish line personnel. These efforts enable the wood manufacturers to be in compliance with the new National Emissions Standard for Hazardous Air Pollutants rule.

#### P2 in Practice Category

**Criterion Catalyst & Technology Company**, in Michigan City, substituted the use of diatomaceous earth with powdered alumina as a filter media in the manufacturing process. In addition to making the substitution to a less hazardous material, Criterion redesigned the manufacturing process to a closed loop recycling process, achieving product yield improvements and significant waste reduction. Criterion realized an economic benefit of \$182,700 annually through the implementation of this project and eliminated the generation of 400 tons of waste filter media annually.

Otis Elevator, located in Bloomington, is a manufacturer of world-class elevator systems. Otis Elevator installed a powder paint coating system to replace a solvent-based painting system. This project resulted in a 93% reduction in paint and solvent waste generation or about 13 tons annually. Additionally, it reduced volatile organic compound (VOC) air emissions by 43 tons from 1998 to 1999. Otis Elevator took a unique approach to this substitution by choosing not to use powder coatings readily available. They instead worked with the manufacturer to incorporate a full substitution for the coatings that are completely free of VOCs and hazardous air pollutants.

**Reilly Industries, Inc.**, in Indianapolis, is a manufacturer of organic chemicals and employs benzene as a solvent in various processes. In 1999, Reilly developed and implemented a closed-loop recycling process to capture benzene previously treated as a waste and reintroduce it into the manufacturing system. This is an example of closed-loop recycling that meets the definition of pollution prevention. This new process saved \$109,000 and reduced hazardous waste by 195 tons annually.

**Styline Furniture**, in Huntingburg, reformulated their wood coatings to a high-solids, low-solvent coating. What took two coats to finish now takes one. They also converted the finishing line operations to a dirt and dust free atmosphere, which cut down on the number of rejected pieces. Styline was in compliance with the NESHAP standards, and chose to go above and beyond what was required by the standards. This project eliminates 26 tons of volatile organic compounds and saves them over \$37,000 per year.

#### Research and Development Category

Crane Division, Naval Surface Warfare Center received an award for implementing several product reformulations and developing and testing a proton-exchange membrane fuel cell technology. The reformulation for flares, smokes, and ignition compositions substantially reduced the occupational health risks and allows for the continued high quality production of these munitions. Crane estimates that over 13 tons of carcinogenic material will be avoided in the next 7 years. The fuel cell project will allow Crane to eliminate sulfur dioxide (SO2), significantly reduce the nitrogen oxides (Nox) and carbon dioxide (CO2), and additionally cut in half the CO2 associated with the energy production of the project.

**Ingersoll-Rand Corp.**, Exit Device Division (Von Duprin), in Indianapolis, eliminated the use of copper cyanide in their plating operation by switching to an alkaline plating solution. It took engineers from the plant several years to find a viable substitute for their particular plating application. This project enables Ingersoll-Rand to eliminate 120,000 gallons of cyanide-bearing wastewater and 1,000 pounds of cyanide-bearing solids annually.

#### Education and Outreach (Honorable Mention)

**Prodesign Composites**, in Middlebury, opened their facility to the Indiana Clean Manufacturing Technology Institute to perform an emissions study to evaluate the effectiveness of an operator training program for the fiber reinforced plastics industry. The tests showed that styrene emissions can be reduced as much as 22.4%, and overall employee exposure levels could be reduced by 24.8%. Implementation of this program will typically save a facility thousands of dollars per spray booth per year.

#### **Governor's Toxic Reduction Challenge**

In September 2001 OPPTA made a series of mailings to determine progress by participants in the Governor's Challenge goals. Facilities were asked to return annual progress reports and that information coupled with RY 2000 TRI data was used to show results.

Measurable TRI reductions of Carcinogenic and PBT Chemicals				
Released to Air and Water				
Facility Name	95' 00' <u>.1 deminius chemicals*</u> (% Change)			
3M HARTFORD CITY PLANT	-100.00			
ALLISON TRANSMISSION, PLANT 12/14	-100.00			
CARRIER CORPORATION	-100.00			
DELCO ELECTRONICS CORPORATION, PLANT 1	-100.00			
G&T INDUSTRIES OF INDIANA INC.	-100.00			
JOHNSON CONTROLS INC.	-100.00			
LILLY CORPORATE CENTER	-100.00			
NAVISTAR INTERNATIONAL TRANSPORTATION CORP.	-100.00			
PREFERRED TECHNICAL GROUP, INC.	-100.00			
VISTEON AUTOMOTIVE SYS - INDIANAPOLIS PLANT	-100.00			
BEST ACCESS SYSTEMS	-99.90			
GASKA TAPE INCORPORATED	-95.43			
WESTERN TAR PRODUCTS CORP	-88.47			
BP AMOCO OIL CO. WHITING TERMINAL	-85.00			
GE APPLIANCES, BLOOMINGTON, INC.	-84.72			
TIPPECANOE LABORATORIES	-83.42			
GE PLASTICS CO.	-80.77			
REILLY IND. INC.	-65.20			
LILLY TECHNOLOGY CENTER	-60.13			
DELCO ELECTRONICS CORPORATION, BYPASS	-58.58			
FACILITY Total				
VIKING FORMED PRODUCTS	-47.41			
ISPAT INLAND INC	-45.59			
CLINTON LABORATORIES	-40.35			
BP AMOCO OIL COMPANY WHITING REFINERY	-24.82			

<sup>\*</sup> Percentage change associated with TRI 0.1 percent de minimus limitations. The OSHA de minimus limitation is 0.1 percent if the chemical is a known or suspect carcinogen by virtue of appearing in one of three sources: the National Toxicology Program (NTP), the International Agency for Research on Cancer (IRAC) or 29 CFR, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration.

Overall participation in the Challenge has been successful. A correlation between Governor's Challenge Participation and reduction in TRI carcinogen and PBT's is observable. As shown above twenty four (24) facilities up to this point in time have shown reduction in air and water carcinogenic and PBT chemicals as asked for in the Challenge.

Total participation in the challenge has come from 75 companies with only 54 of these required to report to TRI. Thirty-one (31) of the 54 show reductions in all TRI chemicals reported to air and water as required by the Challenge. Listed below are some examples of facilities reductions reported during 2001.

**3M Hartford City** has been a leader in P2 since 1975 when it established its Pollution Prevention Pays Program (3P). Hartford City has reduced their TRI releases by over 90%. The results came from acquisition, installation and operation of pollution control equipment for the production lines along with product reformulation using non-hazardous materials. Processes have been moved to other facilities having better equipped to reduce emissions. Future plans include the implementation of MACT with calculations indicating future reductions in TRI releases of 70% from current levels and over 98% compared with 1998 levels.

**Altec Engineering** got a P2 Governor's Award for their non-atomized gel coat application process and the installation of impingement type flow coating. It reduced air emissions by 26,000 pounds. The new system uses a fanned stream instead of atomized spraying to apply the gel coat resins to an open-mold part. This new application system is an emission-reducing alternative to the much more traditional atomized gel coat application system. Also, the company is currently reviewing options in recycling.

**Astral Industries Inc.** an Indiana casket manufacture has implemented a powder coating operation that will decrease their toxic emissions. They did this in 2001 and by 2002 anticipate reducing emissions by 50% even with an anticipated increase in production.

#### Eli Lilly and Company

(Facilities-Clinton Laboratories, Lilly Technology Center and Tippecanoe Laboratories)

This company has product development teams that consider alternative routes of manufacturing to minimize the use of hazardous substances and incorporate reuse in concert with their global waste management policy. They are exploring ways to quantify the effectiveness of their P2 efforts. They play a leadership role with other pharmaceutical industry scientists who meet to share technology directed at reduction efforts. The Cleaning Technology Center within Lilly develops new procedures and methodologies to reduce reliance on organic solvents. They also look at ways to reuse such solvents. As a result 8,000 pounds of methanol, 57,360 pounds of acetone and 29,260 pounds of dimethylformamide were reduced. A new recovery process was used to reduce over 90% of the formation /release of unwanted TRI listed chemicals. The same process reduced air and water TRI listed metals (zinc compounds) by about 9,000 pounds. Lilly, Cinergy and several solid waste management districts formed an alliance to exchange mercury fever thermometers with electronic digital thermometers. The exchange resulted in 2,022 thermometers being collected and 89 pounds of elemental mercury collected from other devises. Lilly also, supports the Partners for Pollution Prevention Roundtable consisting of past winners of the Governor's Award for Excellence in Pollution Prevention. It also supports the annual Pollution Prevention Conference through participation in organization committees. They have allocated staff to set on the Clean Manufacturing Board and participate in its initiatives. This includes education on the possibilities of integrating clean manufacturing principles into economic development processes.

**G & T Industries** is reducing their HAP's and VOC emissions to insignificant levels. They report a reduction form 1995 of methylene chloride from 9.77 tons to 0.19 tons in 1998. They had only 4 tons of VOC at that time. In 2000 they had 0 tons of HAPs and 3.86 tons of VOC with further reductions anticipated in 2001 to a trivial or insignificant amount.

**Knauf Fiber Glass GmbH** reduced the amount of n-hexane in adhesive applications from 26% to 8% by weight. They were able to reduce the amount of raw material in the form of ammonia from 26% to 19% by weight. And they are engaged in research and development to lower other Form R chemical releases such as formaldehyde and phenol.

**Madison Chemical Co. Inc.** switched from chromic acid anhydrous to a 40% solution. In a process change, they pump their nitric acid directly into the mixers eliminating handling and the production of particulate matter to the air. They are continually reducing alkyl phenol ethoxylates by replacing them with a linear alcohol ethoxylates. They are developing a new line of cleaners containing alternatives to glycol ethers and developing an alternative to molybdate phosphortizers for their customers.

Naval Surface Warfare Center (Crane) Crane Surface Warfare center is using three reduction projects to address the open burning/open detonation of ammunitions. Their Clean Air Act Title V permit directs them to investigate and implement technologies that reduce reliance on open burning/open detonation. Three technologies are proposed to do this and they include: a Mobile Plasma Treatment System, an Ammunition Peculiar Equipment 1236 Deactivation Furnace and a Confined Detonation Chamber. The new technologies use state of the art methods for the treatment of munitions. They control the air emissions and convert some of the ash into inert slag.

Navistar International Transportation Corp. (International Truck and Engine Corporation) has changed the type and amounts of resins used in the facility. The results have significantly reduced the amount of phenols from the company.

Nachi Technology Inc. Nachi Technology Inc., Greenwood has eliminated all toxic substances from their processing in 2000. In 2000 they installed several controls to upgrade facility capabilities. The first was the installation of oil/water separators to address storm water runoff and the other system addresses the internal functioning of the facility. The Nachi associates clean their work areas every shift, which results in the accumulation of cleaning water and other solutions. A second oil/water separator processes these fluids for recovery.

Nachi has developed a system and achieved the ISO14001 EMS standards. They used IDEMs guidelines for Reduce, Reuse and Recycle to follow reduction goals for the facility. They reduced by 20% the amount of grinding wheel dust going to the landfill. They reduced the amount of all purpose oil absorbent used throughout the facility by a minimum of 10%. Eliminated the use of a custom specific rust preventive and used the old preventive on other lines.

New York Blower Company installed a non-atomization flow-crop spray gun that helped reduce styrene emissions and they included operator training for the equipment. Also they installed a power coating system to replace another system for reduction of emissions. They consolidated their natural gas and electrical utility systems which is expected to reduced the utility usage 10%. New high-efficiency glass craft non-atomizing low pressure spray guns were installed to improve the flow-coat technology. This effort further reduce styrene emissions by 20% by reducing resin usage. A computerized energy control system was installed to manage their energy usage.

**Preferred Technical Group Inc. (DANA Coupled Products)** reduced sulfuric acid and hydrochloric acid aerosols by 719 pounds and 644 pounds respectively using a monthly maintenance program on scrubber units. They used recycled metal filters (no lead) for the machining operations and their plating operations will use trivalent chromium coating while discontinuing hexavalent chromium a more toxic chemical. They reduced the amount of sodium dimethyldithiocarbamate in waste treatment offsite by 3149 pounds.

**Reilly Industries** reduced their benzene emissions by making modifications to a column, tanks, and process piping. These changes became a closed-loop recycling system that captured and returned benzene to the process. The total emissions of benzene drop from 38,947 in 1995 to 14,501. They are also an active member of the Partners for Pollution Prevention.

**United Technology Company (Carrier)** has attained a reduction of 25% in their reported metals recycled since 1998. This is for chromium, manganese, copper, zinc compounds and nickel metals.

Whirlpool Corporation, Evansville Division, in October 2000 shut down the company's condenser's black paint line and switched production to a local business utilizing powder coating. The change caused a reduction in annual VOC emissions of 130 tons. The annual potential for HAP's reduction was 33,915 pounds and the SARA TRI related chemicals reduction was 110,428 pounds. The company also has plans to convert its refrigerator plants to non-ozone depleting chemicals used in the manufacturing of polyurethane foam. The project will be completed in late 2002. The Evansville Plant will eliminate the purchase of over 4 million pounds of class II ozone depleting chemicals annually and

eliminate the TRI emissions from these processes. In response to the appliance coating MACT standard, Whirlpool and it's suppliers are working on formulations of paint and clean-up solvents in their door painting line to reduce the HAP's and SARA-TRI reportable chemicals. This should eliminate a potential 60,000 pounds or TRI reportable chemicals.

#### **Compliance and Technical Assistance Program**

The Compliance and Technical Assistance Program (CTAP) is Indiana's small business assistance program (SBAP). CTAP provides confidential, environmental assistance to Indiana businesses who request such services and proactively targets upcoming National Emission Standards for Hazardous Air Pollutants (NESHAPs) and/or other environmental regulations for education and outreach. Outreach efforts include conducting educational workshops, performing confidential site visits, providing confidential phone assistance, and developing recognition programs, compliance assistance manuals, and fact sheets. In order to effectively provide the type of assistance required by the regulated community, strict confidentiality is maintained.

In the next two years, CTAP will focus assistance on new sectors while reviewing sectors where assistance has already been provided. These activities are included in the 2001-2003 Environmental Performance Partnership Agreement with the United States Environmental Protection Agency (EPA).

New sectors for Fiscal Years 2002 and 2003 will include the metal casting (i.e. foundries and die casting facilities) and salvage yard sectors. EPA, the Clean Manufacturing Technology and Safe Materials Institute, Indiana Cast Metals Association, and CTAP will work to develop an environmental management system guidebook for metal casters, encourage foundry sand reuse, develop a New Source Review air permitting guidebook, and increase compliance rates across the industry. For the salvage yard sector, CTAP, IDEM and an outside contractor will develop a compliance assistance manual. The environmental management system guidebook and compliance assistance manuals will be promoted and shared with Indiana facilities not participating in the pilot projects. Additionally, CTAP will provide confidential compliance assistance to facilities throughout the state.

In order to provide the best possible service and to expand focus efforts to new sectors, we have begun to evaluate resources and utilization of our current programs and services. IDEM will determine whether concentrated assistance efforts should continue for each focus sector or whether established programs can be transitioned to applicable trade associations or other outside partners. Past sectors of focus to be re-evaluated include vehicle maintenance, childcare, collision repair, printers, and hospitals. CTAP staff will continue to provide phone and on-site assistance to all sectors. Applicable 5-Star Recognition Programs for those sectors will also be evaluated.

New rules are in process regarding Confined Feeding Operations (CFO). These new rules translate best management practices into enforceable requirements for producers. In order to help educate the public and producers on the requirements through a proactive approach, with OPPTA funding IDEM is producing a video to assist in the statewide implementation of best management practices. The video includes information and footage from all of Indiana's diverse segments of the livestock industry. On camera interviews with producers and industry representatives, will give a balanced, recognizable, and informative perspective to the regulated community.

CTAP will continue to examine and modify its compliance assistance efforts based on new regulations, EPA direction, Hoosier business sector interest, and availability of resources. The following pages will provide information on the number and type of contacts as well as give an indication of the growth of the program. It will also demonstrate the ability of IDEM to analyze the data now being collected for trends and planning purposes to ensure a proactive approach to assisting Indiana businesses.

For additional information regarding IDEM's CTAP program, please review the 2001 Annual Report at http://www.in.gov/idem/ctap/2001ctapreport.pdf.

#### **Small Operating Systems Program**

Based on a request from the Office of Water Quality, assistance efforts are needed for Indiana's small operating systems (drinking and wastewater). In a joint effort, CTAP and OWQ are combining resources to provide financial, technical and managerial assistance to such systems. The overall goal of the program is to develop and implement targeted strategies for improving compliance rates at smaller wastewater/drinking water systems.

OWQ and CTAP have finalized the strategy to implement this program. Future work will include determining which facilities in Indiana are in greatest need of assistance and overall implementation of the strategy.

#### **Indiana 5-Star Environmental Recognition Programs**

Participation in Indiana's 5-Star Environmental Recognition Programs is voluntary. To be eligible, businesses must be in full compliance with regulations, which are outlined in the manuals available from IDEM's Compliance and Technical Assistance Program. Applicants must submit a complete and accurate application. Businesses earn stars one level at a time, up to the pinnacle five-star award. Each level is a prerequisite for the next. A star remains in effect for a definitive time period (usually 1-2 years), at which time re-application is required. A review committee made up of industry peers, public and environmental health professionals, and other interested persons makes selections.

#### **Drycleaners**

The 5-Star Environmental Recognition Program for Drycleaners is now operating with new, more challenging criteria. We just published a revised application and are currently evaluating the program. Currently, there are 59 drycleaners in the program. For a list of participants, see Appendix A or visit <a href="https://www.in.gov/idem/ctap">www.in.gov/idem/ctap</a>.

#### **Vehicle Maintenance Shops**

The 5-Star Environmental Recognition Program for Vehicle Maintenance Shops was developed to recognize shops that demonstrate exceptional environmental stewardship. A listing of current Indiana Vehicle Maintenance Shops participating in the program can be found in Appendix B. Examples of criteria for the 5-Star program include: replacing solvents, taking extra precautions to ensure hazardous wastes and materials are not spilled or poured into drains and recycling oil, oil filters, antifreeze, batteries, tires and fluorescent light tubes.

As part of IDEM's Vehicle Maintenance Initiative, the *Compliance Manual for Indiana's Vehicle Maintenance Shops* was written in an easy-to-read style and addresses safety as well as environmental regulations. On-site assistance and workshops are available upon request. More information about this initiative is available on our website at: <a href="https://www.state.in.us/idem/ctap/vehicle/index.html">www.state.in.us/idem/ctap/vehicle/index.html</a>.

#### Childcare Facilities

The 5-Star Recognition Program for Childcare Facilities has now been running for over two years. Staff continues to perform site visits, complete compliance checks and review applications. Many facilities renewed their stars this year. A listing of the current participants can be found in Appendix C and on the web at: www.state.in.us/idem/kids/5star/participants.pdf.

#### **Environmental Performance Track Program**

OPPTA assists U.S.EPA in implementation of its national award program. The National Environmental Performance Track program is designed by EPA to recognize and encourage top environmental performers - those who go beyond compliance with regulatory requirements to attain levels of environmental performance and management that benefit people, communities, and the environment. To be eligible a facility must have an environmental management system, history of sustained compliance, continuous environmental improvement & community outreach. Listed below are Indiana facilities that have applied and been accepted into the program:

EPA NATIONAL PERFORMANCE TRACK PROGRAM				
Facility Name	Location	Year Accepted		
BAE Systems Controls	Fort Wayne	2001		
Johnson and Johnson DePuy, Inc.	Warsaw	2001		
Kerr-McGee Chemical LLC	Indianapolis	2001		
Madison Chemical Co., Inc.	Madison	2001		
Northern Indiana Fuel and Light	Auburn	2001		
Pfizer Incorporated	Terre Haute	2001		

For more information please visit: <a href="http://www.in.gov/idem/oppta/performancetrack/">http://www.in.gov/idem/oppta/performancetrack/</a>.

#### **Partners for Pollution Prevention**

Throughout the 1999-2000 the Partners for Pollution Prevention underwent organizational changes to mold the partnership into a more solid structure. Active participants formed executive and conference committees by to provide leadership and organize the annual pollution prevention conference and tradeshow. In early 2000, the Executive committee determined membership in the partnership should require a demonstrated commitment by participants and began development of the Partners for Pollution Prevention Pledge. Beginning September 20, 2000, entities interested in becoming a Partner must meet all existing membership requirements and have a high ranking corporate official sign the pledge. By signing the pledge the companies formally commit to **active** membership in the Partners for P2 and agreed to the following elements of the pledge:

#### INDIANA PARTNERS FOR POLLUTION PREVENTION PLEDGE

- Ensure that our employees are aware of our commitment to pollution prevention and understand their role in implementing pollution prevention objectives and goals.
- Incorporate pollution prevention planning in the development of new products, processes, and/or services.
- Establish a mechanism to monitor our generation of wastes and be able to identify realistic pollution prevention goals.
- Establish a process to listen and respond to our stakeholders concerns.
- Our waste generation information and pollution prevention efforts will be made available to members of our community.
- Establish an outreach program for promoting and supporting pollution prevention efforts that includes one or more of the following:
  - Share our experiences and techniques with customers, suppliers and other industries;
  - Make available and/or support pollution prevention educational workshops;
  - Participate in 2 or more Partners for Pollution Prevention meetings annually;
  - Assist local and state governments and others in establishing pollution prevention programs that will benefit the citizens of Indiana; and the communities in which we operate.
- Support the annual pollution prevention conference.

On September 20, 2000, during a special pledge-signing breakfast ceremony held prior to the beginning of the Third Annual Pollution Prevention Conference and Tradeshow, Commissioner Lori Kaplan and OPPTA Assistant Commission Jim Mahern, provided signed pledge certificates to all participants. To-date Thirty-nine (39) Indiana businesses and organizations committed to the partnership.

The Indiana Partners for Pollution Prevention are:

ABT Company

Altec Engineering, Inc.

BP Amoco Oil

Arrowhead Plastic Engineering, Inc.

Benchmark Products, Inc.

Best Access Systems

City of Elkhart- Public Works & Utilities

**Cinergy Corporation** 

Crane Naval Surface Warfare Center, PPO

Criterion Catalysts & Technologies Co.

CTS Corporation Resistor/Electrocomponents

Daimler Chrysler Corporation, New Castle Machining & Forge

Delphi Delco Electronics Systems

Eli Lilly and Company

Eli Lilly and Company-Tippecanoe-labs

Environmental Management Institute, Inc.

Fujitsu Ten Corp. of America

General Electric Appliances

General Electric Plastics

General Seating of America

**GM** Powertrain Bedford Castings

Improving Kids' Environment

I/N Tek and I/N Kote

Indiana Clean Mfg. Technology & Safe Materials Institute

Indiana Department of Environmental Management

Indianapolis Casting Corp.

**Inland Buildings** 

International Truck & Engine Corp.

Ispat Inland, Inc.

LTV Steel Company

Madison Chemical Co., Inc.

Nachi Technology Inc.

**NiSource** 

Ogden Martin Systems of Indianapolis

Reilly Industries, Inc.

**Rolls-Royce Corporation** 

United Technologies-Carrier

**Utilimaster Corporation** 

Visteon Corporation

#### **Department of Defense Pollution Prevention Partnership**

In spring of 1999,OPPTA began discussing a formal partnership between IDEM and various military installations located throughout Indiana. By early 2000 a Pollution Prevention Partnerships Charter was drafted and signed by seven military installations in Indiana, USEPA Region V and IDEM.

By signing the DoD/State of Indiana Pollution Prevention Charter, all parties commit to the following elements of the Charter:

#### Department of Defense/State of Indiana Pallution Prevention Partnership Charter

#### NOISIN

To enhance mission readiness and promote environmental stewardship by forming a proactive, results-driven pollution prevention partnership.

#### MISSION

Create a working relationship with government agencies and local communities to promote and implement pollution prevention as the preferred strategy for: protecting the environment; conserving resources; fostering community well-being; achieving State and Federal environmental priorities; and enhancing mission readiness at DOD facilities in Indiana.

#### Guiding Principles

- Utilize consensus-based decision-making.
- Demonstrate commitment to partnership participation.

#### GOALS

- Integrate pollution prevention into everyday activities to maintain or surpass regulatory requirements.
- Promote open dialogue and pollution prevention information exchange.
- Encourage community involvement.
- Establish objectives and measurable targets with which to measure performance.
- Emphasize educational opportunities to promote pollution prevention awareness.
- Embrace innovation and encourage continuous improvement.
- Document results of pollution prevention initiatives such as costs, monetary savings, waste reduction, safety improvements and liability reduction.

AND SAFE MATERIALS

INSTITUTE

RICHARD H CLEVENGER, Colonel, IN ANG

Commander, 122nd Fighter Wing

**ADOPTED SEPTEMBER 2000** FRANCIS X. LÝONS LORI KAPLAN Commissioner Regional Administrator Indiana Department of USEPA Region V Environmental Management T. SCOTT WETTER JOHN R. LOYD COL, OD, Commanding CAPT, USN **NSWC Crane Division** Crane Army Ammunition Activity CHRISTOPHER M. JONIEC ROBERT J. MITCHELL Colonel, USAFR opert Correspond MAJOR GENERAL, INARNG Commander, 434th Air Refueling Wing The Adjutant General Blue Devde GARY L. PETERS JAMES F. PHILLIPS, LTC, EN COL, IN ANG Regional Engineer, US Army Reserve 88th Regional Support Command Commander INDIANA CLEAN MANUFACTURING TECHNOLOGY

#### **Annual Pollution Prevention Conference and Trade Show**

For the third and fourth years, the Indiana Partners for Pollution Prevention and OPPTA hosted Indiana's pollution prevention outreach effort. A Partners conference committee made up of representatives from OPPTA, CMTI, Reilly Industries Inc., NAVSEA Crane, the Environmental Management Institute, Eli Lilly, Madison Chemical, United Technologies Carrier Division, Visteon Indianapolis, and Best Access Systems, organized the one-day event. Conferences highlights included excellent motivational speakers in the morning presentation of the Seventh and Eighth Annual Governor's Awards for Excellence. Approximately 200 persons attended each conference. Conferences evaluations indicated the conferences were very successful and the plenary speakers were outstanding.

#### Great Lake Regional Pollution Prevention Roundtable's 2000 Summer Conference

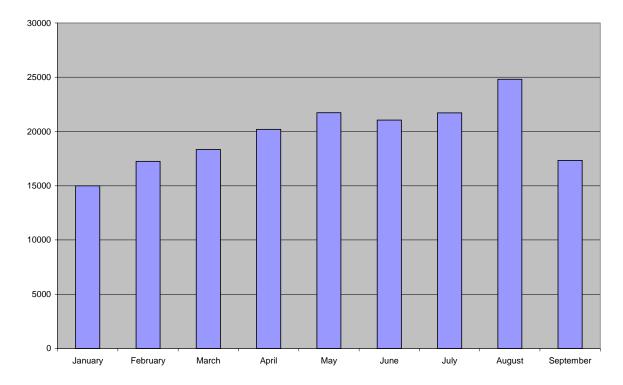
With help from the CMTI and our Partners for P2 at United Technology Carrier and Eli Lilly, Indianapolis, OPPTA hosted the Great Lake Regional Pollution Prevention Roundtable's (GLRPPR) Summer Conference at the Crowne Plaza Hotel in Indianapolis, Indiana on August 29-30,2000. Indianapolis Deputy Mayor Mike O'Connor a former IDEM Commissioner provided the conference opening plenary. Ninety-seven participants attended the two-day event. Many participants came from Great Lakes regional states and Canada. The conference provided IDEM with an opportunity to explain OPPTA's successes in a series of pollution prevention oriented breakout sessions. Site visits to demonstrate Indiana P2 success stories were provided by the United Technologies Carrier plant in Indianapolis and the Coating Application Research Laboratories at Purdue.

#### OPPTA'S WEBSITE (www.in.gov/idem/oppta)

During 2001, IDEM's website underwent major changes including a new look and layout. OPPTA created many new pages as a result. OPPTA hired a web contact to manage OPPTA's web site and began making many of these updates. Old, outdated pages were removed and the process of reviewing each page for accuracy, usage, and proper standards began. Web hits increased from 14,500 hits per month in 2000 to an average of over 17,000 hits per month in 2001 (see Figure below). During the summer months, hits averaged much higher with August showing an all-time high of 25,000 hits. OPPTA places high value on its website and continues making updates and changes to improve the efficiency of the site. One of the most helpful web tools developed during the past year was an alphabetical list of OPPTA topics. This allows web users to easily find information on OPPTA's site simply by looking up a particular topic. OPPTA also received an office specific search feature. The site continues to grow and improve with new and easier to find information available.

In addition, OPPTA developed a web-based customer satisfaction survey. Questions in the survey allow OPPTA to find out how customers find out about us, what size businesses are using our services, how satisfied are they with us and much more. The complete survey is available at <a href="http://www.in.gov/idem/oppta/survey.html">http://www.in.gov/idem/oppta/survey.html</a>. A summary of the survey results was recently provided to the Environmental Quality Service Council (IDEM's Legislative Oversight Committee). OPPTA will continue to gather surveys from customers to ensure the highest customer satisfaction is provided.

OPPTA Web Hits: 2001



#### **Drycleaners Workshops**

We conducted twelve compliance workshops from late 1999 to 2001. We served over 130 customers in the cities of Indianapolis, Gary, South Bend, Jeffersonville, Evansville, Clarksville, and Fort Wayne.

#### **Vehicle Maintenance Shop Workshops**

OPPTA conducted five compliance workshops from late 2000 to 2001. OPPTA served over 115 customers in the cities of Indianapolis, New Albany, Fort Wayne and Valporaiso.

#### **Toxic Release Inventory**

To assist Indiana's manufacturing communities comply with federal Toxic Release Inventory reporting requirements, OPPTA provided free educational workshops to facilities subject to the requirements. OPPTA created and mailed out workshop brochures to over 3000 Indiana manufactures. In the year 2000 over 3800 postcards were mailed to prospective attendees. Workshops were provided in five areas of the state.

Toxic Release Inventory Workshops 2001				
Indianapolis*	March 15	113 people		
Scottsburg	May 03	22 people		
Evansville	May 15	22 people		
Portage	May 22nd	28 people		
South Bend*	May 30	124 People		
Total 309 people				
*Sponsored by U.S. F	*Sponsored by U.S. Environmental Protection Agency Region V			

Toxic Release Inventory Workshops 2000					
Indianapolis*	May 4th	106 people			
Ft Wayne	May 16th	68 people			
Scottsburg	May 18th	21 people			
Indianapolis	May 22nd	60 people			
Evansville	May 24th	28 people			
Total 283 people					
*Sponsored by U.S.	*Sponsored by U.S. Environmental Protection Agency Region V				

#### **Childcare Centers**

Technical assistance to childcare facilities continued with site visits to facilities expressing interest in the 5-Star Recognition program. Free lead risk assessments continue to be offered to those facilities in buildings constructed prior to 1978. In spring of 2000, 28 parent information sessions were held throughout Indiana. IDEM staff was present to answer questions regarding lead, mercury, radon and other environmental threats. Over 150 parents attended meetings in Salem, Shelbyville, Kokomo, Michigan City and Indianapolis.

#### **Greening the Government Environmental Management System Pilot Project**

On Earth Day, April 22, 1999, Governor O'Bannon signed Executive Order 99-07 titled, "Greening the Government". The goal of this order is to improve the environmental performance of all State operations. One of the many projects included in the order was the Environmental Management System pilot project, which will consist of three state facilities implementing an environmental management system.

The Indiana Department of Administration (State Motor Pool Garage), Indiana State Department of Health (Indiana Soldiers' and Sailors' Children's Home) & Indiana Department of Transportation (Greenfield District Office) each signed a memorandum of understanding with the Indiana Department of Environmental Management. The Compliance and Technical Assistance Program is facilitating the development and implementation of an environmental management system at each of these facilities.

Several meetings and site visits have taken place since May of 2001 to assess the scope of the pilot project with each of the three facilities. Based on these meetings, the scope of each project will be limited to the vehicle maintenance facility of the State Motor Pool Garage, power (steam) house of the children's home, & administration building (which included a road material testing laboratory) at INDOT's District Office.

An environmental policy has been developed for each facility. Based on site visits and some informal interviews with facility staff, environmental aspects and impacts were documented. Input was sought from facility representatives to modify/consolidate each list. Methods of determining significance were discussed and considered at the garage and children's home. Nothing was finalized, except at the district office, which also drafted objectives and targets to address significant environmental aspects.

#### International Organization for Standardization (ISO) 14001 Pilot Projects

In 1997, the Office of Pollution Prevention and Technical Assistance accepted a \$100,000 grant from the EPA. The purpose of the grant was for OPPTA to recruit Indiana facilities to participate in a new national research project. The project's goal was to answer the following question - how does ISO-14001 impact a facility's environmental performance. The answer to this question would be determined by data submitted from participating pilot projects around the United States. After 3 years of work from 10 state representatives and 67 facilities, the results are close to completion and analyzed.

Indiana started with 14 pilot facilities. However, due to facilities' time and resource constraints, only four (4) facilities completed the project. Indiana's facilities submitted all data required of the national

initiative. Updated data will be crucial in making final determination on the "true" impact of EMSs. The EPA, Environmental Law Institute, University of North Carolina and state representatives developed two reports outlining progress and answers to date. Also, the national database is now available for downloading to anyone interested. Both the reports and the database can be accessed at OPPTA's website: <a href="https://www.in.gov/idem/oppta/p2/iso14000.html">www.in.gov/idem/oppta/p2/iso14000.html</a>.

#### **Metal Casting Outreach/Assistance Project**

CTAP is working with U.S.EPA on a new sector initiative. The project is one of many under the Sustainable Industries Partnership Program. Multiple projects covering several media are included in this initiative. Projects include: development of a Clean Air Act New Source Review permitting guidebook, development of a beneficial reuse of spent foundry sand guidebook, compliance and environmental assistance, and implementation of ISO-14001 at several Indiana metal casters. The New Source Review guidebook has been drafted and is now on its second version. Before developing an ISO-14001 system, facilities need to compare what components are currently in place and implemented versus what the actual ISO-14001 standard requires. This is commonly referred to as a "gap analysis". A "gap analysis" was performed by the Indiana Clean Manufacturing Technology and Safe Materials Institute at all of the seven Indiana pilot facilities.

#### **Indiana Waste Tire Management Program**

State Law requires IDEM to manage the piles of scrap tires abandoned over the years throughout the State and to promote beneficial reuse of the million tires coming off our vehicles each year. The goal of the program is to divert tires from solid waste landfills to solid recycling/reuse markets.

OPPTA's Waste Tire Management Facility Outreach Program co-sponsored a regional Scrap Tire Educational Conference presenting topics on national trends for waste tire processing to recover energy or marketable products. Over 100 people attended the two-day conference with six regional state waste tire programs represented.

To keep the outreach and education program moving forward, the Compliance and Technical Assistance Program (CTAP) is providing compliance assistance through mailings of new rule guidance material and follow up site visits to waste tire processors. As a part of this program every operation is offered assistance in preparing an emergency response contingency plan to help minimize the potential impacts from tire fires and mosquito breeding in water trapped within whole tires. In addition to the compliance assistance, CTAP is researching the interest and application of waste tire recycling/reuse grant program for engineering applications and research and development.

#### **Styrene Outreach**

OPPTA held several workshops this year on the new Indiana rule to address the release of styrene (326 IAC 20-25). Styrene is a hazardous air pollutant that is most likely to affect the nervous system and may cause depression, concentration problems, muscle weakness, tiredness, nausea, and possible eye, nose and throat irritation. According to the International Agency for Research on Cancer, styrene is potential human carcinogen.

Two workshops were held in Indianapolis for IDEM staff and local businesses interested in this rule. A workshop was also held in Elkhart for businesses in that area was co-sponsored by CMTI. Sample compliance reporting forms, question and answer documents, and other compliance assistance documents were created and distributed for the fiberglass industries affected by this rule. A listserve was created by OPPTA allowing quick and easy reminders to be sent to the industry regarding environmental regulations.

#### **Compliance Assistance Manuals**

Several new compliance assistance manuals became available this year including those for the following industries: wood furniture, fiber-reinforced plastics, and printers. The wood furniture and fiber reinforced plastics manuals are web interactive, allowing the user to link to the regulation and

other helpful web pages. Both are available on the web at: <a href="www.in.gov/idem/ctap">www.in.gov/idem/ctap</a>. Existing manuals for drycleaners, childcare facilities and vehicle maintenance shops were updated to cover recent rule changes affecting them.

CTAP is finalizing a compliance manual for the collision repair shops its 7<sup>th</sup> compliance manual for Indiana small businesses. To go along with existing compliance manuals for vehicle maintenance, childcare, drycleaners and printers, a collision repair manual will be available in the first quarter of 2002. The web-based manual will be available to download on the newly created collision repair website. In conjunction with the release of the manual, CTAP will present compliance workshops statewide and offer on-site compliance assistance.

#### **Printers Initiative**

In August 2001, the "Compliance and Pollution Prevention Guidebook for Indiana Printers" was published by Printing Industry of Illinois/Indiana (PII). IDEM awarded a \$15,000 grant to PII for the production of the manual. PII matched the grant with an equal amount of money. On September 26, 2001, we conducted a compliance workshop in Indianapolis to cover the material in the manual. Eight people attended. We will be working with PII to determine if we will be doing further outreach with this sector. We are considering workshops for 2002.

#### **Planning for Profits... A Guide to Pollution Prevention**

In August 2001, the "Planning for profits ...A Guide to Pollution Prevention for Indiana Businesses" was adapted and revised to fit Indiana business by the Indiana Department of Environmental Management, Office of Pollution Prevention and Technical Assistance. This guide is an adaptation of a document developed by New Hampshire Department of Environmental Services Pollution Prevention Program, with grant funding from U.S.EPA-Region 1."Planning for Profits ...A Guide to Pollution Prevention. This guide helps all Indiana Businesses that do not have readily available resources, or can't afford in-house professionals to complete their pollution prevention planning process. For more information on this publication, please visit the following website:

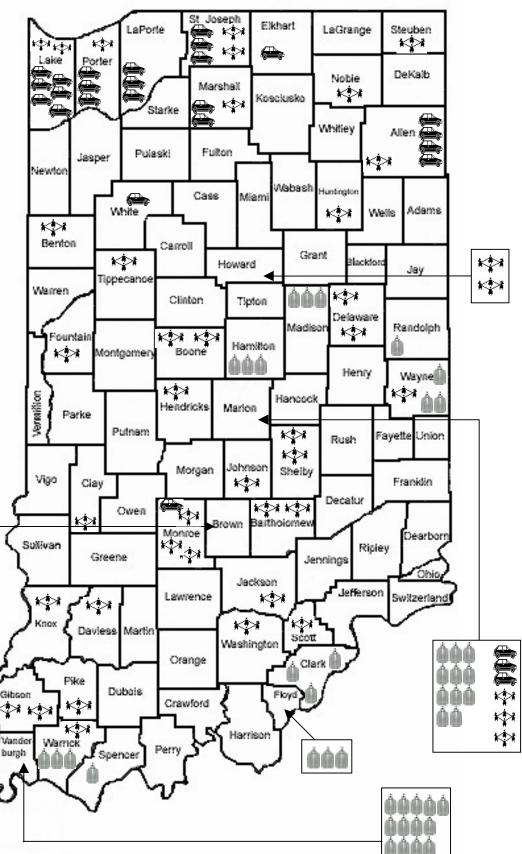
www.in.gov/idem/oppta/p2/p2guide.pdf. The website averages 43 hits per month.

# 5-Star Award Recipients

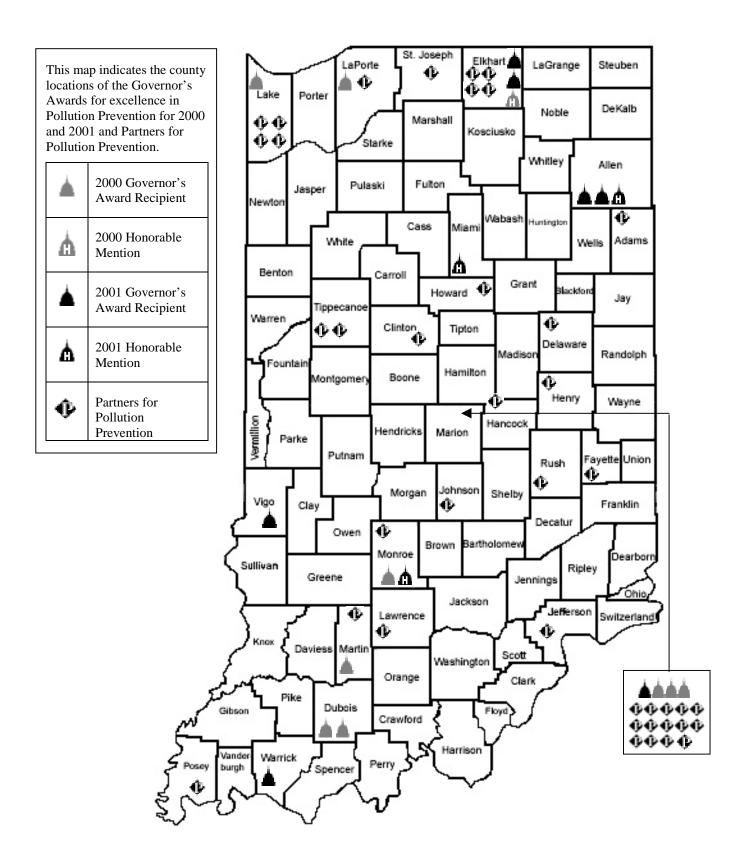
This map identifies the county locations of childcare facilities, drycleaners and vehicle maintenance shops that achieved the pinnacle five star rating in 1999 and 2000.



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## **Awards and Partners for Pollution Prevention**



### Chapter 3

### Toxic Release Inventory: OPPTA Quantitative assessment of the State's Progress in Pollution Prevention

This section is geared toward assessing the reduction of toxic releases utilizing Toxic Release Inventory (TRI). It summarizes and analyzes data submitted by Indiana facilities on releases and environmental waste of chemicals and chemical compounds designated by the U.S. EPA as toxic chemicals under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986. More information on specific P2 opportunities can be found in chapter one and two. Indiana manufacturers reduced their Toxic Chemical Releases Inventories from 134 million pounds in 1991 to 60 million pounds in 1999.

In addition environmental waste as reported during the same period decreased by some 34 percent with 100 million pounds decrease showing up from 1998 to 1999.

In 1998 seven new reporting sectors were required to report to the federal TRI. This resulted in six of the seven sectors reporting in Indiana. There were environmental waste amount changes from 1998 because of these new requirements. Their percentage increases and decreases are as follows; chemical production facilities up 15 percent, coal mining up 38 percent, bulk oil terminals up 21 percent, solvent recovery down 3 percent, RCRA transfer, storage, disposal facilities down 91 percent and finally electricity generating facilities up 5.5 percent.

Further, TRI relies on Occupational Safety and Health Administration's (OSHA) definition of "carcinogen" to identify chemicals that warrant added attention due to their potential to cause cancer in humans. In 1998 Indiana identified four regions with large urban populations and significant manufacturing activity as priority regions that might show releases associated with these chemicals. Approximately 48 percent of the total releases of known and potential carcinogens were reported in four counties: Elkhart, Marshall, Gibson and Adams. The central, northwest and southwest regions decreased by 59 percent, 28 percent, and 15 percent respectively. The rest of the state and the northern region increased 18 percent between 1995 and 1999. Also, approximately 500,000 pounds fewer carcinogen releases were reported in 1999, compared to 1998. The 1999 known and potential carcinogen releases are down 18 percent from the 1991 amounts.

For more details on the quantitative assessment of the State's Progress in Pollution Prevention, please visit: <a href="https://www.in.gov/idem/soe/2001report/pollutants.pdf">www.in.gov/idem/soe/2001report/pollutants.pdf</a>

# Appendix A Indiana 5-Star Environmental Recognition Program For Drycleaners Award Recipients Updated through October 2001 - Round 16

5-Star Drycleaners:

Armstrong Cleaners	48 South 8th Street	Richmond	47374	Cleaning plant	2/96 8/99
Timburong Citamors	616 E. Washington Street	Winchester	47394	Drop-off store	2/96 8/99
Armstrong Formal Wear	1019 North A Street	Richmond	47374	Drop-off store	2/96 8/99
Bestway Cleaners, Inc.	2716 Nichol Avenue	Anderson	46011	Cleaning plant	10/95 4/99 10/01
	706 South Scatterfield Rd	Anderson	46012	Cleaning plant	10/01
	210 West 29th Street	Anderson	46016	Drop-off store	10/95 4/99 10/01
Classic Cleaners	8629 Bash Street	Indianapolis	46256	Cleaning plant	6/96 4/99
	8150 Oaklandon Road	Indianapolis	46236	Cleaning plant	6/96 4/99
	9538 East 126 <sup>th</sup> Street	Fishers	46038	Cleaning plant	12/97 4/99
	7810 East 96th Street	Fishers	46038	Cleaning plant	6/96 4/99
	7239 East 116th Street	Fishers	46038	Drop-off store	12/97 4/99
	4211 East 62nd Street	Indianapolis	46220	Drop-off store	6/96 4/99
	8628 Purdue Road	Indianapolis	46268	Drop-off store	9/96 4/99
	1113 East 86th Street	Indianapolis	46268	Drop-off store	9/964/99
	9564 Allisonville Road	Indianapolis	46250	Drop-off store	12/97 4/99
	8515 Westfield Blvd	Indianapolis	46240	Drop-off store	6/96 4/99
	11202 Fall Creek Road	Indianapolis	46256	Drop-off store	4/99
Claytons Fine Drycleaning	4319 First Avenue	Evansville	47710	Cleaning plant	10/95 4/99
	1404 Washington Avenue	Evansville	47714	Cleaning plant	2/96 4/99
	8355 State Rd. 66	Newburgh	47630	Cleaning plant	2/96 4/99
	122 N. Weinback	Evansville	47711	Drop-off store	2/96 4/99
	1405 Oak Hill Road	Evansville	47711	Drop-off store	2/96 4/99
	4600 Bellemeade	Evansville	47715	Drop-off store	2/96 4/99
	707 North St. Joseph	Evansville	47712	Drop-off store	10/95 4/99
	10488 Newburgh Road	Newburgh	47630	Drop-off store	2/96 4/99
	431 Main Street	Mt. Vernon	47620	Drop-off store	10/95 4/99
Don's Cleaners	225 W Morgan Ave Bldg 3B	Evansville	47710	Cleaning plant	10/95 8/97 3/00
	2000 E. Morgan Avenue	Evansville	47711	Drop-off store	10/95 8/97 3/00
	900 Main Street	Evansville	47708	Drop-off store	10/95 8/97 3/00
	4202 First Avenue	Evansville	47710	Drop-off store	10/95 8/97 3/00
	5625A Vogel Road	Evansville	47715	Drop-off store	10/95 8/97 3/00
	518 N. Barker Avenue	Evansville	47712	Drop-off store	10/95 8/97 3/00
	825 S. Green River Road	Evansville	47714	Drop-off store	10/95 8/97 3/00
	1 Sharon Place	Newburgh	47630	Drop-off store	10/95 8/97 3/00
Fabric Care Center	5760 West Morris Street	Indianapolis	46241	Cleaning plant	10/95 10/01

Appendix A (continued)
Indiana 5-Star Environmental Recognition Program for Drycleaners Award Recipients Updated through October 2001 - Round 16

5-Star Drycleaners (Continued):

3-Star Drycleane	<u>rs (Continueu).</u>				
Kringle's Kleaners	35 Kringle Place	Santa Claus	47579	Cleaning plant	11/00
Nu-Yale Cleaners	6300 Highway 62	Jeffersonvill	47130	Cleaning plant	4/97 3/00
		e			
	2940 Holman Lane	Jeffersonvill	47130	Drop-off store	4/97 3/00
		e			
	3314 Grantline Road	New Albany	47150	Drop-off store	4/97 3/00
	3109 Blackiston Mill	New Albany	47150	Drop-off store	4/97 3/00
	704 Highlander Point	Floyd Knobs	47119	Drop-off store	4/97 3/00
	2039 Hunter Station	Sellersburg	47172	Drop-off store	4/97 3/00
P&G 1-Hour	5628 Georgetown Road	Indianapolis	46254	Cleaning plant	10/95 3/98
Cleaners					11/00
Richmond Cleaners	651 NW 5th Street	Richmond	47374	Drop-off store	10/95 8/97
Southern Plaza	4019 S Ransdell	Indianapolis	46227	Drop-off store	9/96 4/99
Village Laundry					
(Classic Cleaners)					
4-Star Drycleane	<u>rs:</u>				
40 Minute Cleaners	7017 S. Madison	Indianapolis	46227	Cleaning plant	10/95 8/99
All About Clothes	321 South Michigan Ave	Greenshurg	47240	Cleaning plant	12/96 8/99

40 Minute Cleaners	7017 S. Madison	Indianapolis	46227	Cleaning plant	10/95 8/99
All About Clothes	321 South Michigan Ave	Greensburg	47240	Cleaning plant	12/96 8/99
Fabric Masters Dry	8620 East 96 <sup>th</sup> Street	Fishers	46038	Cleaning plant	3/98 4/99
Cleaning					
Hilgers Laundry &	434 Main Street	Tell City	47586	Cleaning plant	10/95 4/99
Cleaners					10/01
One Hour Cleaners	52 West Third Street	Peru	46970	Cleaning plant	6/96 4/99
Xaver Cleaners	217 N. Michigan Street	Plymouth	46563	Cleaning plant	10/95 8/99

3-Star Drycleaners:

Bloomington	317 West 17th	Bloomington	47404	Cleaning plant	10/95 8/99
Cleaners, Inc.					
Fashion Cleaners	9429 North Meridian St	Indianapolis	46260	Cleaning Plant	10/01
Fashion Cleaners	5528 E Fall Creek Pky N Dr	Indianapolis	46250	Drop-off store	10/01
Ideal Cleaners	105 East Washington	Culver	46511	Cleaning plant	4/96 11/00
OK Modern Dry	404 South Main Street	Bluffton	46714	Cleaning plant	10/95 3/00
Cleaners					

2-Star Drycleaners:

45 Minute Cleaners	960 Indiana Avenue	Indianapolis	46202	Cleaning plant	9/96 8/99	
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1-Star Drycleaners:

Colonial Cleaners	1761 West US 30	Valparaiso	46383	Cleaning plant	4/99
Colonial Cleaners	1924 East Commercial Ave	Lowell	46356	Drop-off store	4/99

#### **SUMMARY**

Number of Stars	Number of Cleaners
*	2
**	1
***	5
***	6
****	45
TOTAL	59

### APPENDIX B Indiana 5-Star Environmental Recognition for Vehicle Maintenance Shops

County	Facility Name City		# of Stars	Member Since
Allen	American Electric Power	Fort Wayne	5	Sept '00
Allen	American Electric Power	New Haven	5	Sept '00
Allen	American Electric Power	Fort Wayne	5	July '99
Allen	Northern Indiana Public Service Company	Fort Wayne	5	Sept '00
Allen	Indiana National Guard	Fort Wayne	2	Sept '99
Bartholomew	Indiana National Guard	Edinburgh	2	Sept '99
Bartholomew	Indiana National Guard	Edinburgh	2	Sept '99
Cass	Indiana National Guard	Logansport	2	Sept '99
Clay	Indiana National Guard	Brazil	2	Sept '99
Daviess	Wilson's Auto Service, Inc.	Washington	1	June '99
Dubois	Indiana National Guard	Jasper	2	Sept '99
Elkhart	Northern Indiana Public Service Company	Goshen	5	Sept '00
Elkhart	Indiana National Guard	Elkhart	2	Sept '99
Floyd	Indiana National Guard	New Albany	2	Sept '99
Floyd	Marvin's Auto Service, Inc.	New Albany	3	June '99
Grant	Indiana National Guard	Marion	2	Sept '99
Howard	Indiana National Guard	Kokomo	2	Sept '99
Lake	Larry's Auto Care, Inc.	Griffith	5	June '99
Lake	Northern Indiana Public Service Company	Hammond	5	Sept '00
Lake	Northern Indiana Public Service Company	Crown Point	5	Sept '00
Lake	Northern Indiana Public Service Company	Gary	5	Sept '00
Lake	Smith Chevrolet	Hammond	5	July '99
Lake	Stan Mize Towne & Countree Auto Sales, Inc.	Schererville	5	June '99
Lake	Indiana National Guard	Gary	2	Sept '99
LaPorte	Hirsch Ford-Lincoln-Mercury, Inc.	Michigan City	5	June '99
LaPorte	Northern Indiana Public Service Company	LaPorte	5	Sept '00
LaPorte	Rolling Diesel Service	Rolling Prairie	5	July '99
Lawrence	Indiana National Guard	Bedford	2	Sept '99
Madison	Indiana National Guard	Alexandria	2	Sept '99
Madison	Indiana National Guard	Anderson	2	Sept '99
Marion	O'Brien Toyota	Indianapolis	5	June '99
Marion	Strohm Automotive, Inc.	Indianapolis	5	June '99
Marion	Tom Wood Nissan/Subaru/Volkswagen	Indianapolis	5	June '99
Marion	Indiana National Guard	Indianapolis	2	Sept '99
Marion	Indiana National Guard	Indianapolis	2	Sept '99
Marshall	Martin-Buick-Pontiac GMC	Plymouth	5	July '01
Marshall	Northern Indiana Public Service Company	Plymouth	5	Jan '00
Monroe	World Wide Automotive Service	Bloomington	5	June '99
Monroe	Indiana National Guard	Bloomington	2	Sept '99
Montgomery	Indiana National Guard	Crawfordsville	2	Sept '99
Newton	O'Neil's Repair Service	Goodland	2	June '99

# APPENDIX B(continued) Indiana 5-Star Environmental Recognition for Vehicle Maintenance Shops

County	Facility Name	City	# of Stars	Member Since
Porter	City of Valparaiso	Valparaiso	5	July '99
Porter	Northern Indiana Public Service Company	Valparaiso	5	Sept '00
Porter	Porter County Career Center	Valparaiso	5	Mar '01
Porter	City of Valparaiso	Valparaiso	3	July '99
Shelby	Indiana National Guard	Shelbyville	2	Sept '99
St. Joseph	City of South Bend	South Bend	5	Sept '99
St. Joseph	Equipment Services North	South Bend	5	July '01
St. Joseph	Northern Indiana Public Service Company	South Bend	5	Sept '00
Tippecanoe	Indiana National Guard	Lafayette	2	Sept '99
Vanderburgh	Indiana National Guard	Evansville	2	Sept '99
Vigo	Indiana National Guard	Terre Haute	3	Nov '99
Wayne	Indiana National Guard	Richmond	2	Sept '99
White	Northern Indiana Public Service Company	Monticello	5	Sept '00

### **APPENDIX C**Indiana 5-Star Environmental Recognition for Child Care Facilities

County	Facility Name	City	Туре	# of Stars	Member Since
Allen	Children's EduCare Center	Fort Wayne	Center	5	July '99
Bartholomew	Columbus Childcare Center Head Start	Columbus	Center	3	May '99
Bartholomew	Cummins Child Development Center	Columbus	Center	5	July '01
Bartholomew	Hope Head Start	Норе	Center	3	May '99
Bartholomew	Kinder Care 0570	Columbus	Center	5	July '99
Benton	Benton Co. Head Start/Community Action Program	Oxford	Center	5	Oct. '00
Boone	Dover's Angels	Dover	Ministry	5	May '99
Boone	Peppermint Palace Day Care & Learning Center	Lebanon	Center	5	July '99
Boone	Precious Heritage Academy	Lebanon	Ministry	3	July '01
Brown	BCHS Child Care Center	Nashville	Center	5	May '99
Brown	Hickory Ridge Head Start	Morgantown	Center	5	May '99
Brown	Wee Are The World, AEdu- Care@	Nashville	Home	5	May '99
Carroll	Tiny Tots Daycare	Delphi	Home	3	July '99
Clay	Kountry Kids Child Care	Center Point	Home	5	May '01
Daviess	Kidz Korner	Washington	Home	5	July '99
Decatur	Westport Head Start	Westport	Center	3	May '99
Delaware	Sandy's Small Wonders Home Day Care	Parker City	Home	5	July '99
Delaware	Wee Wisdom Nursery School and Child Care Center	Muncie	Center	5	July '99
Fountain	Fountain/Warren Head Start	Covington	Center	5	July '00
Gibson	Community Day Care	Oakland City	Center	5	Oct. '00
Gibson	Dickman Daycare II	Fort Branch	Home	3	July '99
Gibson	Dickman Daycare III & Teddy Bear Preschool	Fort Branch	Home	5	July '99
Hendricks	Community Childcare Center	Plainfield	Center	5	May '99
Howard	Khids Daycare	Kokomo	Center	5	Oct. '00
Howard	Polk's Little Folks Daycare	Russiaville	Home	5	Oct. '00
Huntington	Kids Kampus	Huntington	Center	5	May '99
Jackson	Brownstown Head Start	Brownstown	Center	3	July '01
Jackson	Seymour Head Start	Seymour	Center	5	May '99
Johnson	Canary Creek Head Start	Franklin	Center	3	July '01
Johnson	Discovery Child Development Center	Franklin	Center	5	May '99
Knox	KCARC Civitan Children's Center	Vincennes	Center	5	July '99
Lake	My School	Crown Point	Center	5	July '00
Lake	Seedlings Learning Center, Inc.	Dyer	Center	5	May '01
Lake	Woodland Child Development Center	Hammond	Center	3	Jan. '01

# APPENDIX C (continued) Indiana 5-Star Environmental Recognition for Child Care Facilities

County	Facility Name	City	Туре	# of Stars	Member Since
Marion	AYS Kindergarten/Preschool Harcourt	Indianapolis	Center	3	May '99
Marion	Conejo Creative Developmental Child Care	Indianapolis	Center	5	Jan. '00
Marion	Deborah's Teeny World	Indianapolis	Home	3	July '99
Marion	Dena's Child Care Center	Indianapolis	Center	3	July '99
Marion	Fairview Presbyterian Church	Indianapolis	Ministry	3	May '99
Marion	First Meridian Heights Kindergarten	Indianapolis	Center	3	May '99
Marion	Robin's Nest Childcare Center	Indianapolis	Center	5	Jan. '00
Marion	Sugar N' Spice	Indianapolis	Home	5	Jan. '01
Marshall	Twin Lakes Day Care	Plymouth	Home	5	Jan. '01
Monroe	Bloomington Developmental Learning Center	Bloomington	Center	5	May '99
Monroe	Kybra Daycare	Bloomington	Home	5	July '99
Monroe	Monroe County United Ministries/Preschool	Bloomington	Center	5	Oct. '99
Noble	Kendallville Day Care Center, Inc.	Kendallville	Center	5	July '99
Pike	Little Bears Child Care	Petersburg	Home	5	Oct. '99
Porter	That Loving Learning Place	Valparaiso	Home	5	May '99
Posey	Children's Learning Center of Posey County.	Mount Vernon	Center	5	July '99
Shelby	Mary's Care	Shelbyville	Home	5	July Oct '99
Shelby	Shelbyville Head Start	Shelbyville	Center	5	July '01
St. Joseph	Circle of Mercy	South Bend	Center	5	May '99
St. Joseph	North Star	South Bend	Center	5	May '99
Scott	Kids Place Austin	Austin	Center	5	Oct. '00
Steuben	First Street Day Care	Hudson	Home	5	Oct. '00
Tippecanoe	Little Tin Soldier	Lafayette	Home	5	May '99
Vigo	Tender Moments Infant and Toddler Childcare	Terre Haute	Home	3	May '99
Warrick	Nannies Daycare	Chandler	Home	5	April '00
Washington	Williams Child Care	Pekin	Home	5	Oct. '00
Wayne	First Friends Child Care Center	Richmond	Center	5	Oct. '99